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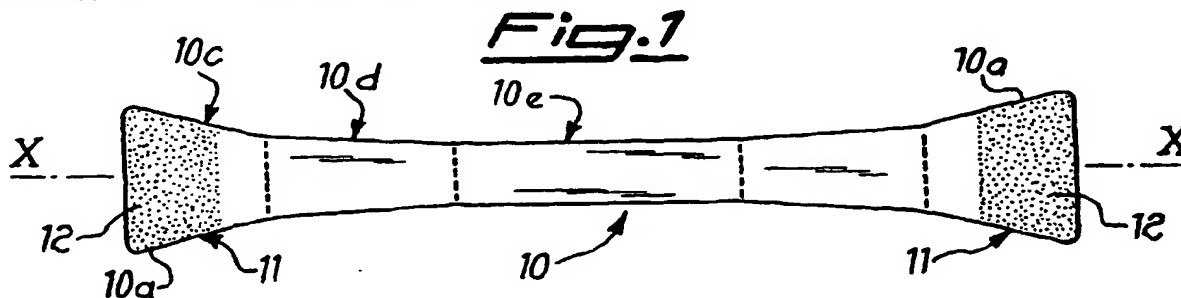
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(54) Extendable device for hanging objects of various shapes

(57) Device for hanging objects (20) of various shapes, consisting of a strip (10) of deformable material, the opposite ends (10a) of which have an adhesive

zone (11) for joining to the object to be hung.



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Description

[0001] The present invention relates to a device for hanging objects of various shapes and sizes such as bottles and the like.

[0002] It is known in the art that there is the need to hang a large variety of objects both for display purposes and for particular operation of the object which must be hung in order to be used, for example in a raised position with respect to the user.

[0003] Examples of the first type may include objects which are displayed in shop windows, while examples of the second type may include bottles for phlebotomy, or generally containers which, in order to supply the contents, must have a certain head to ensure the supplying action itself.

[0004] It is also known that, according to the present state of the art, it is required to use bulky and relatively complicated supports which must be provided separately from the container with obvious drawbacks and the need to check and manage the availability thereof.

[0005] These drawbacks are particularly obvious in environments such as hospitals, rest homes and nursing homes and the like on account of the large number of supports which must be managed.

[0006] The technical problem which is posed, therefore, is that of providing a support device for objects such as containers and the like which can be easily associated with and/or applied to said objects so as to be available together with the object itself.

[0007] Within the scope of this problem a further requirement is that this device should have small dimensions so as not to increase the overall dimensions of the object to which it is applied and so that the packaged condition of the latter remains unchanged.

[0008] These technical problems are solved according to the present invention by a device for hanging objects of various shapes, formed by a strip of deformable material, the opposite ends of which have an adhesive zone for joining to the object to be hung.

[0009] Further details may be obtained from the following description of a non-limiting example of embodiment of the invention provided with reference to the accompanying drawings, in which:

Figure 1 shows a plan view of a device for hanging objects according to the invention;

Figure 2a shows a container with the support device applied in the packaged condition;

Figure 2b shows the container according to Fig. 2a with the device extended so that it is ready for engagement with a support element;

Figure 3 shows a plan view of a further embodiment of the device according to the invention;

Figure 4 shows a plan view of a variation of the device according to Fig. 3; and

Figure 5 shows the device according to Fig. 3 applied to a container.

[0010] As illustrated in Fig. 1, the device according to the invention consists of a strip 10 with a shape substantially elongated in a longitudinal direction X-X.

[0011] The internal surface of the opposite ends 10a of the strip 10 has a zone 11 extending over a suitable area and with, applied onto it, an adhesive layer 12 for joining to the container 20 (Fig. 2a).

[0012] The adhesive strip is divided up into zones 10c, 10d, 10e with different lengths in the longitudinal direction and different widths in the transverse direction and is made of extendable, but not elastic material so as to undergo a permanent deformation when pulled in the longitudinal direction.

[0013] By correctly dimensioning the said geometrically different zones which, in the example according to Fig. 1, are three in number, but may be increased or reduced as required, it is possible to perform adjustment of the extension of the strip 10 according to the specific applicational needs.

[0014] As shown in Figs. 2a, 2b, during use, the support device 10 is applied by means of adhesive 12 to the bottom edge 20b of the side surface 20a of the container 20 - an operation which may be performed manually or by means of automatic machines - being arranged substantially in contact with the bottom 20c of the container itself.

[0015] Since the central part of the strip is non-adhesive, it may be gripped by the user during use and pulled outwards, thus imparting a pulling force to the strip in the longitudinal direction, which causes elongation thereof in the said direction, thus basically forming an arch which allows the container to be hung from a support element such as a hook or the like, not shown. Fig. 3 shows a first variation of an example of embodiment of the device in which the central zone thereof has a wider portion 30 which during use facilitates gripping and pulling of the strip 10 and also forms a zone for joining to a fixed support element which has a larger area and is stronger.

[0016] Said widened zone 130 may also be provided with two eyelets 131 which allow the definition of two opposite curved sections 132 of the strip which, after stretching of the latter, may be folded so as to form a ring into which the support element may be inserted.

[0017] It is therefore obvious how the device according to the invention allows easy and low-cost automatic production thereof, easy and low-cost application to the container without an increase in the overall dimensions thereof, and subsequent variation in its dimensions for use.

[0018] In addition to this, a further characteristic feature consists in the fact that the device may be applied without drawbacks also to containers, the bottom of which is concave such as, for example, sanitary bottles for phlebotomy.

[0019] It is also envisaged that the device for hanging objects according to the invention may be provided separately from the object to which it must be applied; in

this case the internal surface is covered by a strip of suitable material which covers the adhesive, but may be easily removed from it when it is joined to the object to be hung.

[0020] It is also obvious that a person skilled in the art may envisage different plan-view shapes of the device according to the invention which nevertheless retains its essential characteristic features defined by the claims which follow.

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Claims

1. Device for hanging objects (20) of various shapes, characterized in that it is formed by a strip (10) of deformable material, the opposite ends (10a) of which have an adhesive zone (11) for joining to the object to be hung. 15
2. Device according to Claim 1, characterized in that said strip is elongated in a longitudinal direction (X-X). 20
3. Device according to Claim 1, characterized in that it comprises sections (10e, 10c, 10d) having different lengths in the longitudinal direction and different widths in the transverse direction. 25
4. Device according to Claim 1, characterized in that it has a widened section (30; 130) in its central zone. 30
5. Device according to Claim 1, characterized in that said widened zone (130) has two openings (131) defining two opposite strip sections (132). 35
6. Object to be hung, characterized in that it is joined to a device according to Claim 1. 40
7. Object according to Claim 6, characterized in that it is a container (20). 45
8. Object according to Claim 7, characterized in that it is a bottle for phlebotomy. 50
9. Object according to Claim 7 or 8, characterized in that said device is applied onto the side surface (20a) at the bottom (20c) of the container. 55

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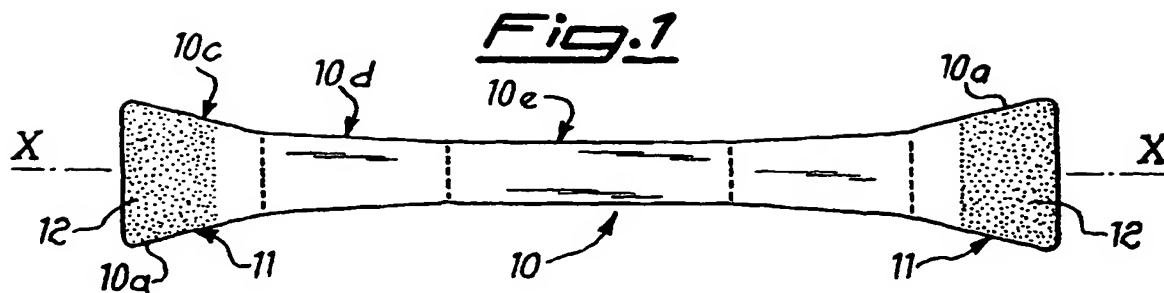


Fig. 2a

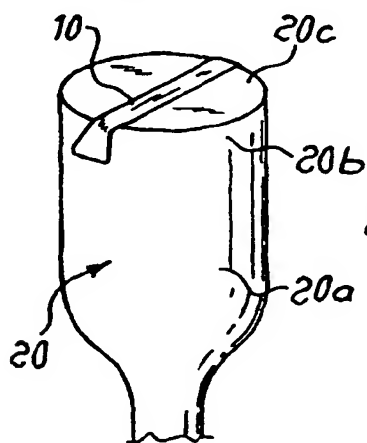


Fig. 2b

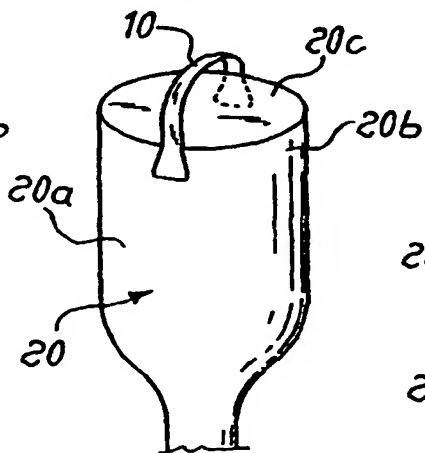


Fig. 5

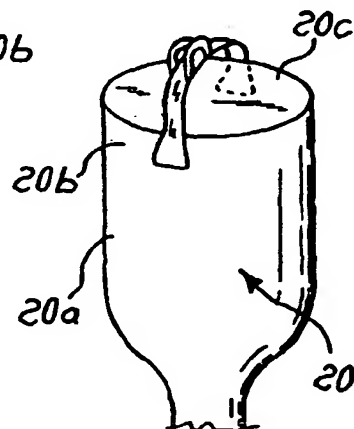


Fig. 3

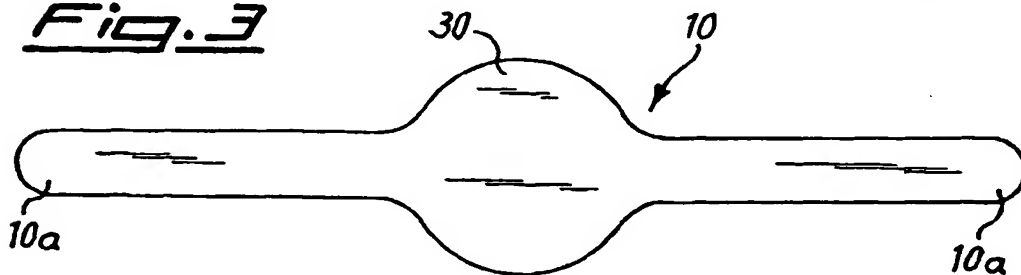
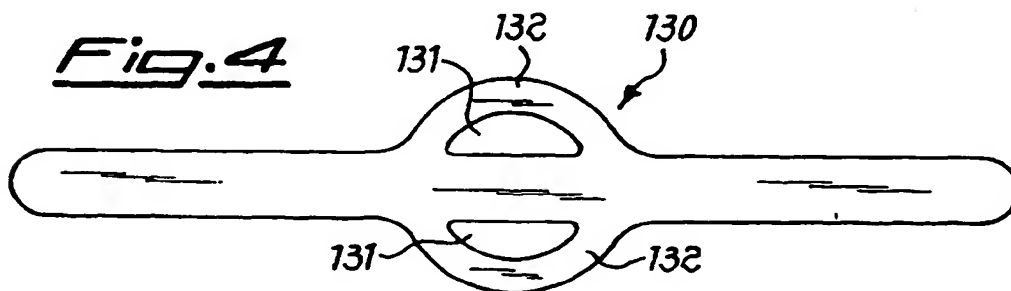


Fig. 4





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EUROPEAN SEARCH REPORT

Application Number
EP 99 20 1573

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	EP 0 628 321 A (COLUMBUS SAS DI ZONI SILVIO) 14 December 1994 (1994-12-14)	1,6,7,9	B65D23/00
A	* abstract; figures *	3	
X	FR 1 269 162 A (LEYMARIE) 13 December 1961 (1961-12-13) * the whole document *	1,2,6,7,9	
A	US 4 412 624 A (TANAKA NOBUYOSHI) 1 November 1983 (1983-11-01) * abstract; figures *	1,5-7	
A	US 5 490 658 A (COWARD RODERICK T ET AL) 13 February 1996 (1996-02-13) * figure 4 *	1,5-7,9	
A	WO 92 14501 A (CORRADO CORMIO) 3 September 1992 (1992-09-03) * page 1, line 1 - line 2 *	8	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B65D
Place of search	Date of completion of the search	Examiner	
THE HAGUE	27 September 1999	Pineau, A	
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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 20 1573

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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27-09-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0628321 A	14-12-1994	IT AR930017 A DE 69415215 D ES 2127848 T	09-12-1994 28-01-1999 01-05-1999
FR 1269162 A	13-12-1961	NONE	
US 4412624 A	01-11-1983	NONE	
US 5490658 A	13-02-1996	WO 9627099 A US RE36258 E	06-09-1996 27-07-1999
WO 9214501 A	03-09-1992	IT 1247738 B	30-12-1994

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82